

Further to our earlier dialogue on this, Imperial has decided to decline your request for an on-camera interview regarding our operation at Norman Wells and the incidents you cited in your recent note (Oct 16). We would, however, provide the information below to respond to the questions you raised. Please let me know if you have follow-up questions that we can respond to. Thanks.

Imperial's goal is to drive spills with environmental consequence to zero. In order to achieve this, Imperial has a robust Operations Integrity Management Systems in place to manage risk, including preventing spills with environmental consequences. The Norman Wells flowline system was reviewed by the National Energy Board during an audit conducted in 2008, which concluded the Norman Wells operation **"has very sound management systems in place and has ensured through the implementation of these systems that all aspects of operations integrity, including safety, health and environment, are addressed in its business planning and management."**

Imperial works to prevent spills through an extensive program of inspection, integrity testing, surveillance, and preventative maintenance. We take proactive measure to replace equipment in a timely and safe manner before leaks can occur. We also pursue spill prevention and mitigation through a number of methods including risk assessments, training, and operating practices. Finally, in the event of an incident, Imperial personnel are trained to respond to minimize uncontrolled release.

Regarding the 2011-2012 incidents you cited:

The 2011-2012 flowline leaks you cited did not result in any release of fluids to the Mackenzie River. The incidents were reported to the NEB and the Sahtu Land and Water Board, and Imperial worked with these regulators throughout the clean-up.

Regarding the NEB July 19, 2013 letter and order:

In response to the National Energy Board's July 2013 letter and order regarding the integrity of flowlines at Imperial's Norman Wells operation, the company has submitted a risk mitigation plan that includes a combination of increased monitoring and integrity testing, repairs to some lines, and abandonment of others, where repairs are not economic. Each of the 77 pipelines has been or will be either in-line inspected, undergo repair, be shut-in, or be replaced. Several of the 77 pipelines already have long standing in-line inspection programs.

The pipeline integrity program implemented at Norman Wells is designed to keep our pipelines operating in a safe manner that prevents environmental impacts. We use both in-line and field inspection techniques along with regular aerial and ground inspections of pipeline routes, with a particular focus on water crossings, environmentally sensitive and populated areas. And we regularly evaluate and inspect pipelines, and proactively repair sections of pipe so that failures are avoided. The efforts we are making to assess and manage the risk of ageing pipelines meet or exceed regulatory requirements.

A number of the other incidents you cited in your Oct 16 note were not connected to flowline integrity:

1. In March 2006, more than 40 thousand litres of water with elevated levels of copper was released into the McKenzie River.

Imperial withdraws fresh water from the Mackenzie River for its once-through cooling loop. The once-through cooling loop uses fresh water to cool process equipment; during this process the water does not come in contact with production fluids as it remains within

separate piping. Imperial follows all water testing requirements, as required by regulators, and in March 2006 Imperial received results which exceeded specified levels. Imperial immediately stopped the release of water back to the river, notified the regulator, and started an investigation into the cause. The levels of copper found in the cooling water always remained well below Canadian drinking water objectives. This incident has since been closed with the regulators and no additional follow up was required once the investigation was completed.

2. **In May 2008, there was a leak of some 400 litres of crude oil when a drilling island was flooded with flowing ice. The data entry suggests it was impossible to recover.**

In May 2008, 200 litres of crude oil were released when a flowline was damaged by flowing ice due to record high water levels. The flowline had been previously purged as a precautionary measure. After the water receded Imperial cleaned up residual oil from vegetation in the area.

3. **In May 2009, 127 thousand litres of produced water entered the McKenzie.**

In 2009, 127 cubic metres of produced water was released to the Mackenzie River when a valve was damaged during spring break-up. When Imperial became aware of the incident, the underground flowline to the well was shut-in and the incident reported to the regulator. Imperial has a well-planned and executed shut-in of facilities when water levels reach record high levels. The facility has controls and processes in place to indicate potential issues. As a result of this incident, the bunker for this well and its anchoring were redesigned.